

# **Gu Test: A Progressive Measurement Of Generic Artificial Intelligence**

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Turing Test is invalid, not only it is subjective, but also the language complexity is much less than the human intelligence complexity.

So instead, I design Gu Test, a progressive measurement of generic artificial intelligence by their falsifiability.

Gödel theorems suggest mathematics can not be used to judge the correctness of sciences. Turing Machine is a subset of mathematics, so there is limitation of Turing Machine. Universal approximation does not exist on Turing Machine.

If the mode evolution is not stable, not only the judgement based on intuition could be wrong, the statistical results and deep-learning of empirical data also could be severely misleading.

Based on my studies, I design some test programs, to test some artificial intelligence systems, and also test my theories:

1. A 4-dimension experiment space for the strongest Computer Go system, to test its intelligence on Go games, especially for AlphaGo Zero's superhuman claim.
2. A progressive test scheme for natural language processing (NLP) system, including identifying those language phenomena which cannot be learnt by computers themselves, but critical to intelligence development.

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The test program could be extended to other kind of artificial intelligence systems in future.

More researches are possible, including a thought experiment to show the problems of Turing Test, and the fundamentals which could lead to Chinese room phenomena, and a brain research plan based my studies of measuring Computer Go and NLP systems, etc.

However, further researches are only possible if I am in safe personally and

economically.